In the Claims:

1. (Currently amended) A multilumen catheter assembly comprising:

an elongated body having a proximal end and a distal end;

a first lumen having:

a sidewall extending between the proximal end and the distal end;

a first distal opening disposed at the distal end; and

a first guide wire opening disposed proximally of the distal end and co-planar with the sidewall; and

a second lumen connected to the sidewall and extending between the proximal end and a second distal end, proximal of the distal end, wherein the second lumen includes:

a second opening extending obliquely away from the sidewall distally toward the first opening; and

a second guide wire opening disposed proximally of the second opening and in a plane generally parallel to the sidewall,

at least the second guide wire opening being elongate in a direction parallel to the axis of the second lumen so that a guide wire extending therethrough may assume only a small angle out of parallel with respect to the second lumen's axis and thereby protrude less outwardly beyond the second lumen's sidewall, thereby facilitating catheter assembly passage along the guide wire through the vessel of a patient.

2. (Original) The multilumen catheter assembly according to claim 1, further comprising a hub connected to the proximal end of the body.

3. (Original) The multilumen catheter assembly according to claim 1, wherein the first lumen further comprises at least one opening disposed proximate of the distal end.

4. (Original) The multilumen catheter assembly according to claim 1, wherein the first distal opening is disposed in a plane generally perpendicular to a plane of the sidewall.

5. (Original) The multilumen catheter assembly according to claim 1, wherein the first distal opening is generally circular.

6. (Original) The multilumen catheter assembly according to claim 1, wherein the first lumen has a generally D-shaped cross section proximate of the second opening.

7. (Original) The multilumen catheter assembly according to claim 1, wherein the second lumen has a generally D-shaped cross section.

8. (Original) The multilumen catheter assembly according to claim 1, wherein the body has a generally round cross-section.

9. (Original) The multilumen catheter assembly according to claim 1, wherein the second opening is tapered.

10. (Original) The multilumen catheter assembly according to claim 1, wherein the first guide wire opening is generally oval shaped.

11. (Original) The multilumen catheter assembly according to claim 1, wherein the second guide wire opening is generally oval shaped.

12-15. (Cancelled).

---16. (New) The multilumen catheter assembly according to claim 1, wherein the first guide wire opening is elongate in a direction parallel to the axis of the first lumen so that a guide wire extending therethrough may assume only a small angle out of parallel with respect to the first lumen's axis and thereby protrude less outwardly beyond the first lumen's sidewall, thereby further facilitating catheter assembly passage along the guide wire through the vessel of a patient.

17. (New) The multilumen catheter assembly according to claim 1, wherein the second distal end concludes in a tip section that is undercut along the first lumen.

18. (New) The multilumen catheter assembly according to claim 17, wherein the undercut beneath the second distal end tip section is elongated to further facilitate deflection.

19. (New) The multilumen catheter assembly according to claim 17, wherein the second distal end tip section is elongated to enable deflection toward the first lumen during patient insertion.

20. (New) The multilumen catheter assembly according to claim 17, wherein the second distal end tip section is tapered and includes a sidewall portion facing away from the first lumen that is angled slightly distally, and the second guide wire opening extends through the angled sidewall portion.

21. (New) The multilumen catheter assembly according to claim 17, wherein the first lumen, distally of the second lumen distal tip section, includes a transition portion that transitions the cross-section of the first lumen from a generally noncircular cross section shape to a generally circular cross section shape, and includes a tapered wall angled slightly proximally toward the second lumen distal tip section.

22. (New) A multilumen catheter assembly comprising:

an elongated body having a proximal end and a distal end;

a first lumen having:

a sidewall extending between the proximal end and the distal end;

a first distal opening disposed at the distal end; and

a first guide wire opening disposed proximally of the distal end and co-planar with the sidewall; and

a second lumen connected to the sidewall and extending between the proximal end and a second distal end, proximal of the distal end, wherein the second lumen includes:

a second opening extending obliquely away from the sidewall distally toward the first opening; and

a second guide wire opening disposed proximally of the second opening and in a plane generally parallel to the sidewall,

at least the first guide wire opening being elongate in a direction parallel to the axis of the first lumen so that a guide wire extending therethrough may assume only a small angle out of parallel with respect to the first lumen's axis and thereby protrude less outwardly beyond the first lumen's sidewall, thereby facilitating catheter assembly passage along the guide wire through the vessel of a patient.- - -